

## **ROOF FLASHING STRIP AND METHOD OF PRODUCTION**

### **CROSS REFERENCE TO RELATED APPLICATIONS**

[0001] This application is a completion application of co-pending United States provisional patent application Serial No. 60/393,396, filed July 2, 2002 for Roof Flashing Strip and Method of Production, the disclosure of which is hereby incorporated by reference.

### **BACKGROUND OF THE INVENTION**

#### **I. Field of the Invention**

[0002] The present invention pertains to roofing flashing strips for waterproofing roofs. More particularly, the present invention pertains to a method of manufacture of roofing flashing strips. Even more particularly, the present invention concerns a method of manufacturing flashing strips by extrusion or molding of a suitable plastic material.

#### **II. Prior Art**

[0003] In U.S. Patent No. 5,946,862 there is disclosed a roof flashing strip and method of production wherein a plurality of individual metal flashing cards are assembled into a linear array to facilitate the installation of roof shingles or the like. According to the patent, the individual flashing cards, which are made of a suitable metal, such as aluminum, tin or the like are assembled together wherein partially overlapping cards are adhered or affixed to one another. An adhesive is used to bond one card to another or they are otherwise secured together with staples, tape or the like. It is to be appreciated that one of the

difficulties is the manufacturing of the strip from individual cards. It is labor intensive to adhere a plurality of individual flashing cards together including depositing the bonding material thereonto in serial fashion.

#### SUMMARY OF THE INVENTION

[0004] In accordance with the present invention there is provided a roof flashing strip and a method of manufacture therefor which, generally, comprises an elongated flashing strip prepared by injection molding or extruding a suitable material in a die or in a suitable mold. Preferably, the flashing strip is extruded in a suitable die under requisite conditions. The strip is formed from a suitable plastic material such as polyvinylchloride (PVC), high density polyethylene, polyvinylacetate, or the like. These plastic materials are suitable for extrusion or injection molding.

[0005] Other extrudable materials include, for example, aluminum, brass, copper, lead, and the like, as well as other water impervious materials.

[0006] In extruding or injection molding the flashing strip, it is formed as a substantially elongated body member of an extended length, such as from about 6 to about 10 feet. This strip can, then, be cut to desired lengths.

[0007] The flashing strip made in accordance herewith, generally, comprises a backing member having a plurality of legs projecting laterally outwardly therefrom and substantially normal thereto. Each of the legs is angularly inclined by an angle  $\theta$  with respect to a horizontal plane. The legs are configured in such manner that a portion thereof overlies an adjacent leg with a gap therebetween.

[0008] The gaps enable the insertion thereinto of a roofing shingle or the like.

[0009] The flashing material hereof can be used in any vertical wall such as a chimney, side wall, or the like.

[0010] For a more complete understanding of the present invention references made to the following detailed description and accompanying drawing. In the drawing like reference characters refer to like parts throughout the several views in which:

#### **BRIEF DESCRIPTION OF THE DRAWINGS**

[0011] Fig. 1 is plan view of flashing strip in accordance with the present invention;

[0012] Fig. 2 is a cross sectional view taken along line 2-2 of Fig. 1;

[0013] Fig. 3 is a plan view showing an installation using the present flashing strip;

[0014] Fig. 4 is a cross-sectional view taken along line 4-4 of Fig. 3; and

[0015] Fig. 5 is a perspective view showing the installation of the flashing strip hereof against a chimney wall.

#### **DESCRIPTION OF THE PREFERRED EMBODIMENT**

[0016] Now, and with reference to the drawing, there is shown a flashing strip 10 according to the present invention.

[0017] The flashing strip 10 comprises an elongated member 16 of any desired length. In use, preferably, the member 16 has a length ranging from about 6 feet to about 10 feet.

[0018] The strip 10 has a backing wall or plate or backing surface 14.

[0019] Projecting laterally outwardly from and substantially normal to the surface 14 of the member 16 are a plurality of substantially parallel legs 18, 18', 18", etc.. Each of the legs 18 is angularly disposed by an angle  $\theta$  with respect to a horizontal plane 17 in serial array. Generally, the angle  $\theta$  will range from about 1° to about 5°. Thus, the legs are vertically displaced from and angularly enclosed with respect to a horizontal plane.

[0020] As shown in the drawing, each of the legs 18, 18', etc., has a first lateral edge 20 and a second opposed lateral edge 22. Each leg is "rising" along the extent thereof from the first edge 20 to the second edge 22 by the angle  $\theta$ .

[0021] Each of the legs 18, 18', etc., has a predetermined length such that a portion thereof underlies an adjacent leg. In other words, a portion of each leg 18, 18', etc., proximate the first edge 20 underlies a portion of an adjacent leg proximate its second edge 22', as shown. Thus, there is a gap 24 created or provided between overlying legs portions. As is discussed hereinafter, this gap 24 enables a roofing shingle or tile 30 to be disposed within the gap 24 for securing of the shingle or tile to an appropriate surface, such as a roof 27 or the like.

[0022] It should be noted that in the practice of the present invention, the gap 24 may be of any size and that the dimensions defined herewithin are preferred but are not intended to be limitative.

[0023] In accordance herewith, the flashing strip 10 is manufactured by extruding or injection molding a suitable material from a die or in a suitable

mold, depending on the method of manufacture employed. Preferably, the flashing strip is injection molded in a suitable die under requisite conditions as dictated by the materials selected for extrusion.

[0024] Suitable injection molded materials for use herein, for example, include polyvinylchloride (PVC), high density polyethylene (HDPE), polyvinylacetate (PVA), polyurethane and the like. The selection of material is dictated solely by its ability to be molded and withstand climatic conditions. Thus, not only plastics, but moldable metals may be used. In the practice of the present invention it is preferred to use a plastic.

[0025] Thus is critical hereto is that the metal or plastic material selected for use herein have sufficient durability to withstand weathering for an extended period of time and at the same time have a sufficient degree of pliability, if necessary, to enable a tile or shingle to be inserted in the gap 24 and at the same time be capable of being severed to required or desired lengths along the length of the strip.

[0026] It is to be appreciated that by providing elongated strips of plastic flashing, it is possible to cut the flashing strip to any desired length or to place strips in adjacent or side-by-side relationships.

[0027] It is contemplated that the extent of overlap will vary between 1" and 7 " between the consecutive legs 18, 18', etc.

[0028] As shown in the drawing and in use, the shingle 30 is slidably seated in the gap 24 with its bottom surface 32 seated atop the upper surface of

the leg 18 and an edge 34 thereof abutting the plate 14 of the flashing strip or card.

[0029] An adjacent shingle is installed the same way in the adjacent portion for the leg 18'. In use, the plate 14 of the flashing strip 10 is abutted against a surface, such as a chimney 40, an exterior wall or the like. The strip may be bonded to the surface via suitable bonding material such as tar, adhesive or the like to prevent any moisture from seeping in between the surface of the plate and the wall or chimney to which it is secured. It can also be secured with a nail, staple, or the like. Because the flashing strip is a continuous strip, there is no need to provide a seal between adjacent flashing cards or the like, thus, reducing the labor necessary to manufacture the flashing strip.

[0030] In manufacturing the flashing strip, the degree of overlap may vary depending on the need to accommodate various sizes of shingles. If, for example, a roof is to be manufactured from small shingles, the legs 18, 18', 18", etc., would overlap from about 5 to about 7 inches. In this way, more shingles may be placed upon the roof, which would be necessary due to the small size of the shingles. On the other hand, if the shingles were exceptionally large on the magnitude of about 18 inches, then the flashing strip would have the individual legs 18, 18', 18", etc., overlapping between 1 and 4 inches. Clearly, intermediate size shingles may also be used with the flashing strip hereof.

[0031] It is apparent that the flashing strip of the present invention provides several advantages over currently available flashing cards and flashing strips in that it is a continuous one piece product which may be cut to size;

prevents water damage to a home by providing an environmental sealing between each of adjacent leg and is extremely stable.

[0032] It is apparent from the preceding that there has been described herein a flashing strip and a method of manufacture therefor that is easy to use and reduces the time necessary to manufacture same over prior systems.

[0033] Having, thus, described the invention what is claimed is: